

**SINGLE CARRIAGEWAY ROAD  
CONVOY WORKING USING 2WAY TRAFFIC LIGHTS**

**SEQUENCE OF OPERATIONS**

**Operational Procedures**

**SIGNS AND CONES MUST ALWAYS BE LOADED AND UNLOADED ON/OFF THE TM VEHICLE FROM THE NON TRAFFICKED SIDE**

**OPERATIVES MUST NEVER POSITION THEMSELVES BETWEEN THE TRAFFIC MANAGEMENT VEHICLE AND THE LIVE CARRIAGEWAY.**

**FRAMES TO BE SECURED WITH SANDBAGS - SUPERVISOR TO ASSESS ON SITE**

**OPERATING CONSTRAINTS**

The table below shows the constraints that apply to Convoy Working as described in this Method Statement and is based on resurfacing ½ Carriageway Width +0.5m Working Area

<b>Carriageway Width</b>	<b>Constraints</b>
6.0 metres or less	<input type="checkbox"/> Convoy working cannot be implemented
6.0 to 7.0metres	<input type="checkbox"/> Works suspended while Heavy Goods Vehicles convoyed through works <input type="checkbox"/> Cyclists sent through alone with traffic held at lights
More than 7.0metres	<input type="checkbox"/> Cyclists sent through alone with traffic held at lights

- A mandatory 10mph speed limit for convoy working
- A 20mph reduction (40mph) below the permanent speed limit in advance of the 10mph speed limit

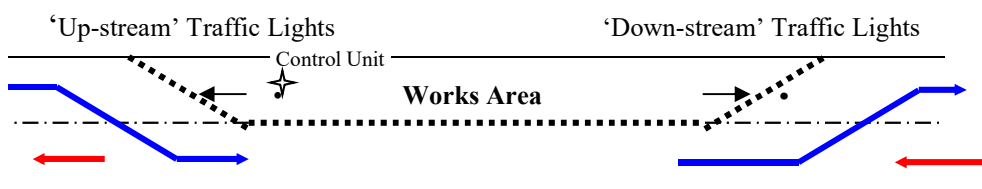
**Traffic and Site Criteria**

- Maximum 2 way traffic flow 600 vehicles per hour
- Length of Site should be no more than 300m

## INSTALLATION OF THE CLOSURE

Before locating positions of Advance signs, determine if safe pull off areas for the convoy vehicle are available or whether a safe pull off needs to be provided by extending the coning either side of the works area

- ❑ Position the advance signs on both approaches, including the 10mph speed restriction signs.
- ❑ Commence with the sign that is furthest ‘upstream’ and continue in the direction of the traffic.
- ❑ Erect the temporary signals with the signal heads facing away from the traffic (positioned to give a maximum length of works of 300 metres).
- ❑ Switch on, and if automatic testing shows signals working correctly:
- ❑ Turn ‘Up-stream’ Lights to face oncoming traffic at **Red**. (Downstream lights at **Green**)
- ❑ Traffic will still be flowing through the works from the ‘down-stream’ end.



- ❑ Place the works closure cones/signs  
*Cones/signs will either have been pre-placed on the verge or will be installed directly from the TM Vehicle.*
  - Walk out or unload and place cones to approach taper and erect 610 Arrows.
  - Walk out cones at 9m or place cones at 9m from the TM vehicle (driving at 5mph in the lane to be closed), from the ‘Up-stream’ Lights to ‘Down-stream’ Lights. Erect 610 Arrow
- ❑ Start shuttle lane running under Traffic Light control until ready for Convoy Working

### **Start Convoy Working**

- ❑ Turn Upstream and Downstream Lights turned to **RED**
- ❑ At the Upstream end, the convoy vehicle will moves into position at head of queue in front of the ‘Wait here for Convoy Vehicle’ sign
- ❑ At this point **both** Lights are on **RED** with the convoy vehicle stopped in front of the ‘WAIT HERE FOR CONVOY VEHICLE’ sign at the ‘upstream end’
- ❑ The operative manning the lights at the ‘upstream end’ will:
  - Contact the operative at the ‘down-stream’ end and confirm that Convoy Working is about to commence.
  - Turn the Lights to **GREEN**
- ❑ The convoy vehicle will drive through the works at 10 mph and continue beyond for a distance such that the last vehicle in the convoy tail is clear of the works area.
- ❑ The operative manning the lights, will turn the Lights to **RED** when the last vehicle in the queue has entered the working area. During busy periods, the number of vehicles allowed through on each cycle may need to be restricted.
- ❑ The convoy vehicle then pulls over into the pull off area.

- ❑ Note: If there is no safe pull off area, the pull off area can be made by extending the works area.
- ❑ The operative manning the lights at the 'upstream' end will inform the convoy vehicle driver of the last 2 vehicles in the convoy.
- ❑ After the last 2 vehicles have passed, the convoy vehicle will turn around, and position itself at the head of the 'downstream' queue.
- ❑ 'Downstream' operative notifies 'Upstream' Operative that Convoy Vehicle is in position at head of queue
- ❑ Upstream operative turns 'Downstream Lights to **GREEN**. The convoy vehicle will drive through the works at 10 mph and continue beyond for a distance such that the last vehicle in the convoy tail is clear of the works area.
- ❑ The operative at the downstream' end will tell the 'upstream' operative to turn the Lights to **RED** when the last vehicle in the queue has entered the working area. During busy periods, the number of vehicles allowed through on each cycle may need to be restricted.
- ❑ The convoy vehicle then pulls over into the pull off area.
- ❑ Note: If there is no safe pull off area, the pull off area can be made by extending the works area.
- ❑ The 'downstream' operator will inform the convoy vehicle driver of the last 2 vehicles in the convoy.
- ❑ After the last 2 vehicles have passed, the convoy vehicle will turn around, and position itself at the head of the 'up-stream' queue.
- ❑ The sequence is then repeated for the duration of the works.
- ❑ The traffic management supervisor will inform the Contractor's works supervisor that convoy working is in operation and work may safely start.

### **ADDITIONAL PROCEDURES**

#### **Side Roads**

- ❑ Arrange works so that in any length of convoy working, so that there is no more than one side road joining.
- ❑ Control traffic on the side road with a manually operated Stop / Go board.  
Allow traffic to exit the side road and to join the tail end of a convoy.

#### Note:

- ❑ Traffic exiting the side road can only turn only in the direction of the convoy train. The stop / go board operator must position themselves to prevent traffic from turning in the wrong direction.

#### **Emergency vehicles**

- ❑ If an emergency vehicle approaches the site the Contractor's works supervisor will halt work and instruct contract staff to move to the rear of the works area.
- ❑ The Contractor's works supervisor will inform the traffic management supervisor that work has ceased and implement all **STOP** stage. When the shuttle lane is clear, the TM operatives will wave the emergency vehicle through. Vehicle can overtake the traffic queue on the offside and proceed through the shuttle lane.

### **CONVOY WORKING PROCEDURE**

**Convoy working is required when a full width safety zone cannot be achieved. It may be desirable for other operations**

- ❑ The Contractor will inform ETMS which Contractor's Supervisor/Foreman is in charge of the works and the traffic management operations.
- ❑ The Supervisor/Foreman will be issued with a ETMS radio for communication purposes
- ❑ The Supervisor/Foreman will instruct ETMS when Convoy working is required to start
- ❑ The Supervisor/Foreman will instruct ETMS when Convoy working is to stop

### **ALL RED PROCEDURE**

- ❑ The Supervisor/Foreman will instruct the ETMS Supervisor to turn lights to all RED when the Contractor needs to carry out operations that impinge on the Shuttle Lane
- ❑ Traffic Lights will be kept on all RED until the ETMS Supervisor is instructed by the Supervisor/Foreman that shuttle lane running can re-commence

### **REMOVING THE CLOSURE**

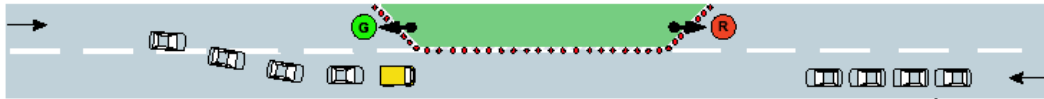
**Traffic management must not be removed until the Contractor's Supervisor/Foreman has informed ETMS's Supervisor that works are complete and the TM can be safely removed. ETMS Supervisor to check closed carriageway clear of all plant, materials**

- ❑ The convoy vehicle will cease operation.
- ❑ Turn traffic lights at RED,
- ❑ Pick up the closure cones and signs
- ❑ Remove the advance signing. – take down 'End' signs

**SINGLE CARRIAGEWAY – SINGLE-VEHICLE WORKING**



1. With both signs on "STOP", the convoy vehicle moves into place at the head of the queue in front of the "...WAIT HERE FOR CONVOY VEHICLE" sign (diagram 7027).



2. The sign is changed to "GO" and the convoy vehicle sets off, leading the traffic past the works at a speed of 10mph or less.

The sign is changed to "STOP" when the last vehicle in the queue has entered the working area. At busy periods this may have to be restricted to a specific number of vehicles.



3. At the end of the works the convoy vehicle pulls over, waves traffic on, then waits until the last vehicle has cleared the works before turning round to proceed in the return direction as Step 1.

The position of the pull-off X should be such that the last vehicle in the convoy has passed the works area before the convoy vehicle pulls off. This can be achieved by extending the coning past the end of the works.

The convoy vehicle at position X should not obscure the "STOP" sign for the opposing vehicles.